the sugar found in the general circulation is almost always secreted by the liver, and as sugar introduced into the intestinal tube in its passage through the liver is there altered and converted into an emulsive substance, which serves to fatten these patients, and thus to counteract their tendency to emaciate.

"2. Substances which contain glucose—such as honey and fruits, should be given to diabetics in preference to those containing cane-sugar, because the latter is not destroyed when injected into the blood, but is constantly eliminated by the kidneys; whereas glucose can be destroyed in certain proportions.

"3. Cane-sugar would be beneficial to a certain extent; as when taken into the intestine it is in part at least transformed into glucose; but if given in too large proportions to be thus completely transformed, the disease would be probably aggravated by the presence in the blood, and subsequent excretion by the kidneys, of the former variety of sugar.

"4. The glucose should be given in moderate quantities at a time, and frequently, rather than in large quantities at long intervals; because, when much sugar is taken fasting, it is absorbed too quickly to admit of its complete destruction in the liver, and it passes into the general circulation, whence it is eliminated in the urine."—*British Medical Journal*, May 8, 1858.

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22. *Researches on Gout.*—Dr. A. Garrod communicated to the Royal Medical and Chirurgical Society (June 8th, 1858) the result of his researches on gout. The author divided his communication into two parts. In the first, were detailed the results of his analyses of the urine in the different forms of gout; the second was devoted to the consideration of the influence of the different forms of colchicum upon the urinary secretion. After describing the method of analysis employed in arriving at his results, and speaking of the opinions usually held upon the subject of the urine in gout, Dr. Garrod proceeded with the first part of his paper, the cases in which he subdivided into three classes.

1st Class.—Cases of acute gout, occurring in patients most of whom, in the intervals of the attacks, enjoyed pretty good health. About thirty analyses for uric acid, made on the twenty-four hours' urine of several different patients, were detailed, and a few for the determination of urea; and from these, the following deductions were drawn: In the earlier stages of acute gout, the urine, for the most part, is small in quantity, and the uric acid, measured by the twenty-four hours' secretion, diminished; that this acid is thrown out in much larger quantities as the disease becomes mitigated, and that these amounts, even above the patient's daily average, may be passed, forming sometimes critical discharges; and, lastly, the acid again becomes lessened, although not to the extent which occurs either just before or at the commencement of an attack. That the urea is usually thrown out in about the normal quantities, although its free elimination by the kidneys is often somewhat impeded, and, in consequence, the blood contains a small excess, which may possibly explain, in some manner, one peculiarity of gouty inflammation when it attacks superficial parts, namely, the presence of œdema and the subsequent desquamation of the cuticle. That occasionally a trace of albumen exists in the urine, but very seldom, compared with its occurrence in the chronic forms of the affection. The 2d class included cases of chronic gout, the majority of which were not suffering from any urgent symptoms, but many were afflicted with some of the sequelæ of the affection, as shown by the concretions of urate of soda upon different parts of the body, and the stiffened condition of the joints. More than sixty analyses for uric acid were given in this class, made upon the day's urine of fourteen different individuals, and numerous determinations of urea were also detailed. The deductions from the observations may be thus summed up: The urine in chronic gout is usually rather pale in colour, below the average tint in the healthy subject, of low density, and increased in quantity. The amount of urea, except in extreme cases, the same as in health (due account being taken of the diet of the patient at the time the urine passed). The uric acid was very much diminished indeed, and subject to excretion in very varied quantities at different times; and, lastly, the presence of a small amount of albumen is exceedingly frequent. Deposits in the urine are not of common occurrence in these subjects; but they occasionally occur on the cooling of the fluid, sometimes in the form of urate of soda or ammonia, at other times crystallized and more or less coloured rhombs of uric acid. Class 3.—Urine of individuals who had suffered more or less frequently from attacks of acute gout, of varying degrees of intensity, examined at the time of complete freedom from any symptoms of the disease. Several determinations were made on the urine of six individuals, and the following results arrived at: In no one of the six patients' urine did the amount of uric acid reach the quantity usually considered to be the average in health; in most of them it was far below, and it would appear that the kidneys in such individuals are apt to lose some of their excretory power for this body, a circumstance which must necessarily render the blood impure, and account for the liability which such patients possess to periodic visitations of this malady, and the great difficulty of effecting a radical cure of the disease.

Part 2.—Devoted to an examination of the influence of colchicum upon the urine. The usual opinions held by different authorities, as Christison, Chelius, etc., upon the modus operandi of this drug, were first related, and many of the analyses brought forward in their support were shown to be very fallacious, the error arising not from any fault in the analyses themselves, but from small specimens of urine, passed at particular times of the day, being examined, and no account taken of the twenty-four hours' elimination. Between fifty and sixty analyses, showing the amount of the uric acid eliminated, were given, together with numerous determinations of the urea. The results of these observations on the action of colchicum were as follows: In one case, where no gouty affection existed, and no febrile disturbance was present, colchicum appeared to have the effect of slightly diminishing the quantity of urine, and likewise of diminishing somewhat the excretion of uric acid. In a second case, similar to the above, the influence of the medicine was notably to diminish the quantity of urine, the uric acid being slightly increased, but the increase was less than a quarter of a grain per diem. In case 3, a gouty patient recovering from an acute attack, the uric acid was somewhat increased during the administration of colchicum, but not in a greater degree than frequently occurs under such circumstances when no medicine is given. In case 4, both the urine and the uric acid were diminished by the influence of the drug; and so on for the other cases. The author considered, as the result of his analyses, 1st. That there is no evidence to prove that colchicum produces its effects upon the system by causing the kidneys to excrete an increased amount of uric acid, but that, in fact, the reverse would seen to hold good. 2d. That colchicum is not always a diuretic, but often diminishes the renal secretion, especially when its action is exerted upon the alimentary canal. 3d. That colchicum has no marked influence on the excretion of urea. An appendix to the paper contained the results of seventy-two analyses, performed on consecutive days, of the urine of a gouty patient; and the results exemplified, in a marked manner, the peculiar mode in which uric acid is frequently eliminated in such cases, and also tended to confirm the conclusions arrived at with respect to the action of colchicum upon the excretion of this principle.—*Med. Times and Gaz.*, June 26, 1858.

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23. *Abdominal Typhus.*—From 100 dissections, from upwards of 1000 cases, Dr. Lebert, of Zurich, deduces the following results:—

Intestinal affection is not always present, and bears no relation to the intensity of the disease—appearing rather to be a co-effect of the fever than sufficient for its explanation. In fatal cases, the intestinal affection has not only formed a slough or sore, but has even frequently ended in resolution; and it is not always easy to discover whether the intestinal affection has entirely failed, or whether it has only been completely resolved. The intestinal affection of typhus bears a very strong resemblance to that of cholera, only in the latter there is usually more serous infiltration; it consists entirely in an increased formation of the normal cell-elements, and there is no such thing, as far as our author has seen, as a specific typhus exudation; while so many other diseases which have a typhoid condition, as pyæmia, severe icterus, meningitis cerebro-spinalis, and the grave cases of acute exanthemata, are accompanied by swell-